

REMARKS:

Reconsideration and allowance in view of the foregoing amendments and the following remarks are requested. By this amendment, Applicants have amended claims 1 and 2. No new matter is added.

Response to Rejections under 35 U.S.C. § 102

Claims 1-33 remained rejected under 35 U.S.C. § 102(b) as being anticipated by Chetverin et al. (U.S. 6,322,971). The Examiner refers to Figure 5B and asserts that Chetverin discloses replication of support-bound single-stranded nucleic acid strands and that the immobilized sequence was “chosen” by the previous step of adding parental sequence strands to the partialing array to form the immobilized sequence. Further, the Examiner rejects claim 2 for similar reasons and asserts that Chetverin discloses that sequences can be copied by PCR to produce double-stranded products and can be assembled by downstream processes such as ligation using splint oligonucleotides.

Applicants submit that Figure 5 in the context of the specification in which the figure is described, i.e., starting at col. 24, line 57, discloses the production of partial copies of a strand. In contrast, according to present claim 1, a complementary copy of specified sequences of support-bound singled-stranded nucleic acids, i.e., a complete copy of the desired sequences selected by the user, is produced. See page 27, line 15 to page 28, line 8 of the specification.

In Chetverin, an immobilized primer which is bound to a strand in a sample is used. Subsequently, the primer is extended complementary to a strand in the sample.

The primer hybridizes to the strand in the sample in a way that only partial sequences can be synthesized. A sequence is not “chosen” by the previous step as the Examiner has asserted, but rather the immobilized strand “begins at the place 32 in the strand where hybridization occurred and ends at the strand’s terminus.” (See col. 25, lines 4-6). Thus, the strand to be replicated is not chosen, but is merely a partial complementary copy of an unknown sequence. Thus, because the sequence of the parent is not known, other than the hybridization region, the sequence of the immobilized strand is not known. The bound sequences are not chosen to be complementary to the nucleic acids to be prepared, but are instead partial copies of unknown strands. Because the location of the hybridization sequence is not known within the context of the immobilized strand, the user does not know the sequence that is being replicated, thus, the final product is not chosen or specified, but is merely a partial copy of an unknown sample. Thus, because the strands in the sample are not complementary to the complete specified sequences of support-bound singled-stranded nucleic acids to be produced, but are partial copies of unknown sequences, the present claims are not anticipated by Chetverin.

Further, claim 2 has been amended to recite that the predetermined nucleic acid double strand to be prepared has its sequence specified by a user, thereby distinguishing the claims from the method of Chetverin. Support for the amendment can be found in the disclosure on page 27, lines 15-18 and page 12, line 31. Thus, as explained above, because the strands in the unknown sample of Chetverin are not complementary to the complete specified sequences of support-bound singled-stranded

nucleic acids to be produced, but are partial copies of unknown sequences, the present claims are not anticipated by Chetverin.

Even if the Examiner maintains the contention that Chetverin discloses a method of preparing at least one complementary copy of support-bound nucleic acids and the strands are "chosen" by the hybridization sequence of the previous step, Applicants submit that the present claims are distinguished from Chetverin because the sequences of the support-bound singled-stranded nucleic acids are not **specified**, but are rather random and unknown. This is a fundamental difference that clearly distinguishes the inputs, design, output, and goals of the presently claimed method from that of Chetverin. Thus, Applicants submit that Chetverin does not anticipate the presently claimed method and respectfully request that the rejections be withdrawn.

Conclusions

In view of the above remarks, Applicants believe that all of the Examiner's rejections set forth in the September 28, 2009 Office Action have been fully overcome and that the present claims fully satisfy the patent statutes. Applicants, therefore, believe that the application is in condition for allowance. The Director is authorized to charge any fees or overpayment to Deposit Account No. 02-2135.

The Examiner is invited to telephone the undersigned if it is deemed to expedite allowance of the application.

By Robert B. Murray/
Robert B. Murray
Attorney for Applicant
Registration No. 22,980
ROTHWELL, FIGG, ERNST & MANBECK
1425 K. Street, Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040

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